

Title (en)  
Thioalkenylphosphonic acid ester and process for the preparation thereof

Title (de)  
Thioalkylphosphonsäureester und Verfahren zu deren Herstellung

Title (fr)  
Ester d'acide thioalkylphosphonique et procédé de préparation de celui-ci

Publication  
**EP 1055678 A1 20001129 (EN)**

Application  
**EP 00302091 A 20000315**

Priority  
JP 14613599 A 19990526

Abstract (en)  
A phosphonic acid ester compound of the formula: <CHEM> wherein R<1> represents a monovalent group selected from hydrogen, alkyl, cycloalkyl, cycloalkenyl, aryl, aralkyl, alkenyl and silyl, R<2> and R<3> each represent aryl and R<4> represents alkylene or cycloalkylene. The ester compound is produced by reaction of an acetylene compound, R<1>C IDENTICAL CH or HC IDENTICAL C-R<4>-C IDENTICAL CH, with with a phosphorothioate, (R<2>O)2P(=O)SR<3>, in the presence of a palladium complex catalyst.

IPC 1-7  
**C07F 9/40**

IPC 8 full level  
**B01J 31/24** (2006.01); **C07B 61/00** (2006.01); **C07F 9/40** (2006.01)

CPC (source: EP US)  
**C07F 9/4015** (2013.01 - EP US); **C07F 9/4018** (2013.01 - EP US)

Citation (search report)  
• [A] DE 3936885 A1 19910508 - BUNAWERKE HUELS GMBH [DE]  
• [XP] HAN L-B ET AL: "Novel Palladium-Catalyzed Thiophosphorylation of Alkynes with Phosphorothioate: An Efficient Route to (Z)-1-(Diphenoxyphosphinyl)-2-(phenylthio)alkenes", CHEMISTRY LETTERS, no. 9, September 1999 (1999-09-01), pages 863 - 864, XP002901033

Cited by  
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DE FR

DOCDB simple family (publication)  
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